

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

Listing of Claims:

1. (Currently Amended) A method for restoring a path in a communication system between zones comprising:
establishing an inter-zone link with a first border node of a source zone with a second border node of an adjacent destination zone;
identifying an inter-zone link failure between the source zone and the adjacent destination zone;
identifying a pre-planned alternative route;
informing a ~~source/destination~~ node in of the adjacent destination zone of the pre-planned alternative route;
informing a node in the source zone of the pre-planned ~~preplanned~~ alternative route; and
providing communication ~~between the pre-planned alternate route~~ between the adjacent destination zone and the source zone via the pre-planned alternative route.
2. (Currently Amended) The method of claim 1 further comprising:
routing the pre-planned ~~preplanned~~ alternative route through a transit zone.
3. (Original) The method of claims 2 further comprising:
requesting new paths to be established between zones.
4. (Currently Amended) The method of claim 3 wherein the pre-planned alternative route is configured based on class of service requirements.
5. (Currently Amended) The method of claim 2 wherein the pre-planned alternative route is configured based on class of service requirements.

6. (Original) The method of claim 1 further comprising:
establishing new paths to be established between zones.
7. (Currently Amended) The method of claim 6 wherein the pre-planned
alternative route is configured based on class of service requirements.
8. (Currently Amended) The method of claim 1 wherein the pre-planned
alternative route is configured based on class of service requirements.
9. (Currently Amended) A network element configured to restore a path in a
communication system comprised of:
a processor configured to:
 establish an inter-zone link with a first border node of a source zone with a second
 border node of an adjacent destination zone;
 identify an inter-zone link failure between the source zone and the adjacent
 destination zone;
 identify a pre-planned alternative route;
 inform a ~~source/destination~~ node in of the adjacent destination zone of the pre-
 planned alternative route;
 inform a node in the source zone of the pre-planned ~~preplanned~~ alternative route;
 and
 provide communication ~~between the pre-planned alternate route~~ between the
 adjacent destination zone and the source zone via the pre-planned
 alternative route.
10. (Currently Amended) The network element of claim 9 wherein the processor is
further configured to:
route the pre-planned ~~preplanned~~ alternative route through a transit zone.
11. (Original) The network element of claim 10 wherein the processor is further
configured to:
request new paths to be established between zones.

12. **(Currently Amended)** The network element of claim 11 wherein the pre-planned alternative route is configured based on class of service requirements.

13. **(Currently Amended)** The network element of claim 10 wherein the pre-planned alternative route is configured based on class of service requirements.

14. **(Original)** The network element of claim 9 wherein the processor is further configured to:

establish new paths to be established between zones.

15. **(Currently Amended)** The network element of claim 14 wherein the pre-planned alternative route is configured based on class of service requirements.

16. **(Currently Amended)** The network element of claim 9 wherein the pre-planned alternative route is configured based on class of service requirements.

17. **(Currently Amended)** A computer system comprising:

a processor;

a computer readable medium coupled to the processor; and

computer code, encoded in the computer readable medium, configured to cause the

processor to:

establish an inter-zone link with a first border node of a source zone with a second

border node of an adjacent destination zone;

identify an inter-zone link failure between the source zone and the adjacent

destination zone;

identify a pre-planned alternative route;

inform a ~~source/destination~~ node in of the adjacent destination zone of the pre-planned alternative route;

inform a node in the source zone of the pre-planned ~~preplanned~~ alternative route;

and

provide communication ~~between the pre-planned alternate route~~ between the adjacent destination zone and the source zone via the pre-planned alternative route.

18. **(Currently Amended)** The computer system of claim 17 wherein the computer code is further configured to cause the processor to:
route the pre-planned ~~preplanned~~ alternative route through a transit zone.

19. (Original) The computer system of claim 18 wherein the computer code is further configured to cause the processor to:
request new paths to be established between zones.

20. **(Currently Amended)** The computer system of claim 19 wherein the pre-planned alternative route is configured based on class of service requirements.

21. **(Currently Amended)** The computer system of claim 18 wherein the pre-planned alternative route is configured based on class of service requirements.

22. (Original) The computer system of claim 17 wherein the computer code is further configured to cause the processor to:
establish new paths to be established between zones.

23. **(Currently Amended)** The computer system of claim 22 wherein the pre-planned alternative route is configured based on class of service requirements.

24. **(Currently Amended)** The computer system of claim 17 wherein the pre-planned alternative route is configured based on class of service requirements.

25. **(Currently Amended)** An apparatus for restoring a path in a communication system comprising:

means for establishing an inter-zone link with a first border node of a source zone with a second border node of an adjacent destination zone;

means for identifying an inter-zone link failure between the source zone and the adjacent destination zone;

means for identifying a pre-planned alternative route;

means for informing a ~~source/destination~~ node in ~~of~~ the adjacent destination zone of the pre-planned alternative route

means for informing a node in the source zone of the pre-planned ~~preplanned~~ alternative route; and

means for providing communication ~~between the pre-planned alternate route~~ between the adjacent destination zone and the source zone via the pre-planned alternative route.

26. **(Currently Amended)** The apparatus for restoring a path in a communication system of claim 25 further comprising:

means for routing the pre-planned ~~preplanned~~ alternative route through a transit zone.

27. **(Original)** The apparatus for restoring a path in a communication system of claim 26 further comprising:

means for requesting new paths to be established between zones.

28. **(Currently Amended)** The apparatus for restoring a path in a communication system of claim 27 wherein the pre-planned alternative route is configured based on class of service requirements.

29. **(Currently Amended)** The apparatus for restoring a path in a communication system of claim 26 wherein the pre-planned alternative route is configured based on class of service requirements.

30. (Original) The apparatus for restoring a path in a communication system of claim 25 further comprising:

means for establishing new paths to be established between zones.

31. **(Currently Amended)** The apparatus for restoring a path in a communication system of claim 30 wherein the pre-planned alternative route is configured based on class of service requirements.

32. **(Currently Amended)** The apparatus for restoring a path in a communication system of claim 25 wherein the pre-planned alternative route is configured based on class of service requirements.

33. **(Currently Amended)** A computer program product, encoded in computer readable media, comprising:

a first set of instructions, executable on a computer system, configured to establish an inter-zone link with a first border node of a source zone with a second border node of an adjacent destination zone;

a second set of instructions, executable on the computer system, configured to identify an inter-zone link failure between the source zone and the adjacent destination zone;

a third set of instructions, executable on the computer system, configured to identify a pre-planned alternative route;

a fourth set of instructions, executable on the computer system, configured to inform a ~~source/destination~~ node in of the adjacent destination zone of the pre-planned alternative route;

a fifth set of instructions, executable on the computer system, configured to inform a node in the source zone of the pre-planned ~~preplanned~~ alternative route; and

a sixth set of instructions, executable on the computer system, configured to provide communication ~~between the pre-planned alternate route~~ between the adjacent destination zone and the source zone via the pre-planned alternative route.

34. **(Currently Amended)** The computer program product of claim 33, encoded in computer readable media, further comprising:

a seventh set of instructions, executable on the computer system, configured to provide routing the pre-planned ~~preplanned~~ alternative route through a transit zone.

35. **(Original)** The computer program product of claim 34, encoded in computer readable media, further comprising:

an eighth set of instructions, executable on the computer system, configured to request new paths to be established between zones.

36. **(Currently Amended)** The computer program product of 35 wherein the pre-planned alternative route is configured based on class of service requirements.

37. **(Currently Amended)** The computer program product of 34 wherein the pre-planned alternative route is configured based on class of service requirements.

38. **(Currently Amended)** The computer program product of claim 33, encoded in computer readable media, further comprising:

a seventh ~~ninth~~ set of instructions, executable on the computer system, configured to establish new paths to be established between zones.

39. **(Currently Amended)** The computer program product of 38 wherein the pre-planned alternative route is configured based on class of service requirements.

40. **(Currently Amended)** The computer program product of 33 wherein the pre-planned alternative route is configured based on class of service requirements.

41. **(New)** The method of claim 1 further comprising:
identifying an intra-zone failure within at least one of said source zone and said adjacent destination zone; and

dynamically identifying an alternative route using a distributed restoration process associated with said at least one of said source zone and said adjacent destination zone.

42. (New) The network element of claim 9 wherein the processor is further configured to:

identify an intra-zone failure within at least one of said source zone and said adjacent destination zone; and
dynamically identify an alternative route using a distributed restoration process.

43. (New) The computer system of claim 17 wherein the computer code is further configured to cause the processor to:

identify an intra-zone failure within at least one of said source zone and said adjacent destination zone; and
dynamically identify an alternative route using a distributed restoration process.

44. (New) The apparatus for restoring a path in a communication system of claim 25 further comprising:

means for identifying an intra-zone failure within at least one of said source zone and said adjacent destination zone; and
means for dynamically identifying an alternative route using a distributed restoration process.

45. (New) The computer program product of claim 33, encoded in computer readable media, further comprising:

a seventh set of instructions, executable on the computer system, configured to identify an intra-zone failure within at least one of said source zone and said adjacent destination zone; and
an eighth set of instructions, executable on the computer system, configured to dynamically identify an alternative route using a distributed restoration process.